

Amendments to the Specification

1. Please replace paragraphs [0013] through [0015] with the following amended paragraphs.

[0013] The CMP system 100 includes a platen 102, a wafer carrier 104, a platen drive system 106, a wafer carrier drive system 108 and a control unit 110. The platen 102 is configured for mounting a polishing pad 111 [[112]]. The wafer carrier 104 is configured to retain a semiconductor wafer 114 during a chemical mechanical polishing process. During the CMP process, the polishing pad 111 [[112]] polishes a surface 116 of the semiconductor wafer 114 when the wafer carrier 104 and the platen 102 are brought into proximity.

[0014] The platen drive system 106 is mechanically coupled with the platen 102 to rotate the platen 102 and the polishing pad 111 [[112]] in one of a first rotational direction and a second rotational direction. In the top view of FIG. 1, the first rotational direction may be referred to as clockwise and the second rotational direction may be referred to as counter-clockwise. Some embodiments may not permit two-way rotation of the platen 102 and the polishing pad 111 [[112]] in both the clockwise and counter-clockwise directions. In this regard, FIGS. 1 and 2 present the most general case. For embodiments with more limited rotational functionality, the principles described generally herein may be readily adopted to accommodate the limitations.

[0015] The platen drive system 106 is coupled through a drive shaft 118 that rotates with the platen 102 about a center line 120. The platen drive system 106 generally includes a motor such as an electric motor for rotating drive shaft 118, the platen 102 and the attached polishing pad 111 [[112]]. The platen drive system 106 thus forms pad rotation means for rotating the polishing pad 111 [[112]] relative to the rotation of the semiconductor wafer 114 to produce chemical mechanical polishing of the surface 116 of the semiconductor wafer 114. The pad rotation means may equivalently include a motor, transmission system with gears for varying the rotational speed of the platen 102

and a feedback control system for control of the rotational speed. In the illustrated embodiment, the platen drive system 106 is under control of the control unit 110.

2. Please replace paragraph [0028] with the following amended paragraph.

[0028] The CMP system 100 of FIG. 1 further includes a spray nozzle 126 for introducing liquid onto the polishing pad 111 ~~[[112]]~~ to remove particles from the polishing pad. The liquid may be deionized (DI) water, slurry or other pad conditioning material. Preferably, the spray nozzle 126 directs a high pressure spray at the polishing pad to dislodge and remove the particles from the pad surface so that the particles are not re-introduced to the surface of the semiconductor wafer 114.